IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:		
Applicant:	:	Allan Wirth
Serial No.	:	10/647,908
Filing Date	:	August 25, 2003
Title of Invention	:	METHOD AND APPARATUS FOR WAVEFRONT MEASUREMENT THAT RESOLVES THE 2π AMBIGUITY IN SUCH MEASUREMENT AND ADAPTIVE OPTICS SYSTEMS UTILIZING SAME
Examiner	:	n/a
Group Art Unit	:	2877
Attorney Docket No.	:	108-133USANA0

Honorable Commissioner
of Patents and Trademarks
Washington, D.C. 20231

SECOND PRELIMINARY AMENDMENT

Sir:

Prior to examination of the above-referenced Patent Application, please amend the same as follows:

AMENDMENT OF THE SPECIFICATION:

Please amend the Specification to read as follows:

On Page 1, amend the third and fourth paragraphs as follows:

An adaptive optics system automatically corrects for light distortions in the medium of transmission. For example, if you look far down a road on a very hot and sunny day, you will often see what is usually called a mirage. What you are seeing is the response of the rapidly changing temperature in the air causing it to act like a thick, constantly bending lens. As another example, the twinkling of stars is due to the atmosphere surrounding the Earth. Although twinkling stars are pleasant to look at, the twinkling causes blurring on an image obtained through a telescope. An adaptive optics system measures and characterizes the phase distortion of a wavefront of light as it passes through the medium of transmission (and the optical components transmitted therealong) and corrects for such phase distortion using a deformable mirror (DM) controlled in real-time by a computer. The device that measures and characterizes the phase distortions in the wavefront of light is called a wavefront sensor.